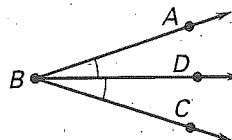


# Practice A

For use with pages 60-66

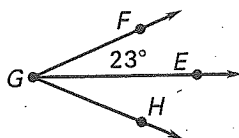
Complete the statement for the diagram at the right.

1. ? is bisected by ?.
2. The measure of  $\angle ABC$  is ? the measure of  $\angle ABD$ .

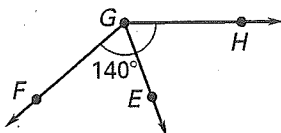


$\overrightarrow{GE}$  bisects  $\angle FGH$ . Find the angle measure.

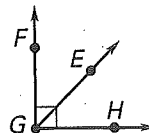
3. Find  $m\angle EGH$ .



4. Find  $m\angle FGE$ .

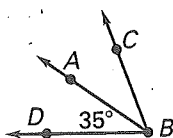


5. Find  $m\angle EGF$ .

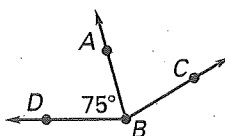


$\overrightarrow{BA}$  bisects  $\angle DBC$ . Find  $m\angle CBA$  and  $m\angle DBC$ .

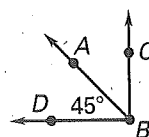
- 6.



- 7.

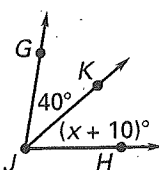


- 8.

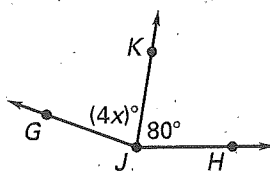


$\overrightarrow{JK}$  bisects  $\angle GJH$ . Find the value of  $x$ .

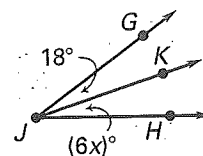
- 9.



- 10.

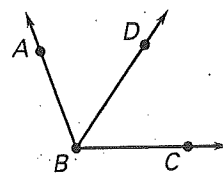


- 11.

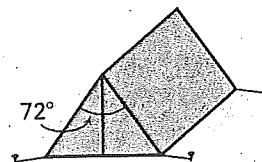


Use the diagram at the right. Decide whether the statement is *true* or *false*.

12. If  $\overrightarrow{BD}$  bisects  $\angle ABC$ , then  $\angle ABD \cong \angle DBC$ .
13. If  $\overrightarrow{BD}$  bisects  $\angle ABC$ , then  $\angle DBC \cong \angle ABD$ .
14. If  $\overrightarrow{BD}$  bisects  $\angle ABC$  and  $m\angle ABD = 55^\circ$ , then  $m\angle DBC = 55^\circ$ .
15. If  $\overrightarrow{BD}$  bisects  $\angle ABC$  and  $m\angle ABC = 112^\circ$ , then  $m\angle ABD = 61^\circ$ .



16. In the pup tent shown at the right, the two sides meet at the top to form a  $72^\circ$  angle. If the tent pole bisects the angle, what angle does the tent pole make with each of the sides?

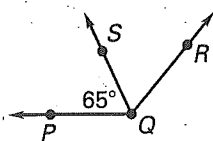


# Practice B

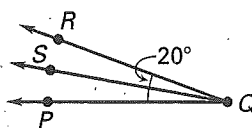
For use with pages 60–66

$\overrightarrow{QS}$  bisects  $\angle PQR$ . Find the angle measure.

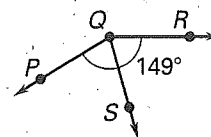
1. Find  $m\angle SQR$ .



2. Find  $m\angle PQS$ .

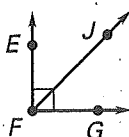


3. Find  $m\angle RQS$ .

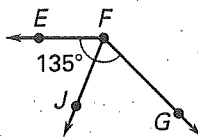


Find the measures of  $\angle EFJ$  and  $\angle JFG$ .

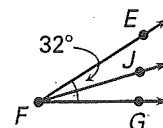
4.



5.

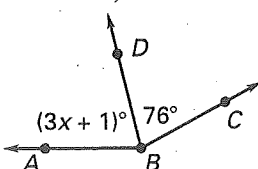


6.

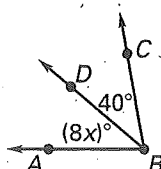


$\angle ABC$  is bisected by  $\overrightarrow{BD}$ . Find the value of  $x$ .

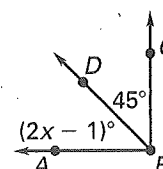
7.



8.



9.



Use the figure at the right to complete the statement.

10. If  $\angle KJM \cong \angle MJL$ , then  $\underline{\hspace{1cm}}$  is an angle bisector.

11. If  $\overrightarrow{JM}$  bisects  $\angle KJL$ , then  $m\angle \underline{\hspace{1cm}} = m\angle \underline{\hspace{1cm}}$ .

12. If  $\overrightarrow{JM}$  bisects  $\angle KJL$  and  $m\angle MJL = 48^\circ$ , then  $m\angle \underline{\hspace{1cm}} = 48^\circ$ .

13. If  $\overrightarrow{JM}$  bisects  $\angle KJL$  and  $m\angle KJM = 46^\circ$ , then  $m\angle KJL = \underline{\hspace{1cm}}^\circ$ .

14. When an air hockey puck is hit into the sideboards, it bounces off so that  $\angle 1$  and  $\angle 2$  are congruent. Find  $m\angle 1$  and  $m\angle 2$ .

